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GENERAL STUDIES (TEST CODE : 1417)

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Medium Hindi/Eng.	English	Registration Number	564612
Center	Jaipur	Date	15/12/20

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
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20	15	

Total Marks Obtained:

Remarks:

Signature of Examiner

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

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1. Dadabhai Naoroji left an indelible imprint on the national movement. Explain. **(150 words) 10**

दादाभाई नौरोजी ने राष्ट्रीय आंदोलन पर एक अमिट छाप छोड़ी। स्पष्ट कीजिए।

Dadabhai Naoroji, also known as 'Grand Old Man of India', was a moderate leader who left an indelible imprint on national movement.

Various dimensions
- Economic
- Political
- Social

Economic dimensions

1) Drain of Wealth → He was a critique of British economic policies & accused them of draining India's wealth in terms of home charges & interest payments on loans.

2) In his book Poverty & UnBritish Rule, he criticised British policy of free trade & huge export duties on Indian products for India's deindustrialisation & ruralisation

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3) Critique of use of railway to promote British interests

4) Welby Commission → He was a part of it & constituted to avoid wasteful expenditure

Political dimension

1) Part of Congress & played an important role in institution of Council Act 1892 where he demanded political & administrative reforms

Political reforms → Expansion of council
→ Reform of council

Admin reforms → Executive judiciary separation
→ Better conditions for foreign Indian labour

2) Played a part in establishment of Aitchison Commission for civil service reforms

3) Formed East India Association

Social

1) Part of Rehnumai Mazdayasan Sabha to demand Parsi reforms.

So Dadabhai Nauroji role in Indian national movement is a valuable one for generations to come.

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2. The Quit India movement marked a new direction in the struggle against the British colonial rule in India. Analyse. (150 words) 10
भारत छोड़ो आंदोलन ने भारत में ब्रिटिश औपनिवेशिक शासन के विरूद्ध संघर्ष में एक नई दिशा को चिन्हित किया। विश्लेषण कीजिए।

Quit India Movement (1942) was a revolutionary movement in India's history where Gandhiji gave the motto of 'Do or die' to achieve independence from British

New direction in struggle

1) It gave impetus to full independence of India as opposed to goals of Swaraj (unclear) or dominion status.

2) It was a mix of both violence & non violent activities as public went on rampage to destroy communication facilities to disrupt British rule.

3) Underground activities formed the backbone of Quit India Movement as leaders like JP Narayan & Usha Mehta (radio channel) took it on themselves to promote nationalist activities.

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4) It led to establishment of parallel governments in regions like Ballia (Chittu Pandey), Tamluk & Satara (Prati Sarkar) which worked for people's welfare.

5) It was launched against failure of Cripps Mission, rising prices of food & fuel & news of British reverses in war. Hence it gave masses energy to channelize their action against these.

6) No instances of communal violence were registered & hence it gave impetus to idea of ~~Ind~~ Hindu Muslim unity to achieve independence.

7) ~~Absen~~ Massive participation by women students & labour class.

8) Absence of Muslim League, CPI & Hindu Mahasabha made their stance clear. Quit India Movement was the last satyagraha by Gandhi & hence was the final nail in coffin of British Rule.

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3. The end of World War II marked the birth of a new international order. Examine. **(150 words) 10**

द्वितीय विश्व युद्ध के अंत ने एक नई अंतर्राष्ट्रीय व्यवस्था को जन्म दिया। परीक्षण कीजिए।

World War II (1939-45) was fought between Axis powers (Germany, Japan, Italy) & Allied powers (US, Russia, UK) & its end brought a new era of international order.

New international order

1) Decolonization ⇒ It gave impetus to nationalist movement across countries (like India) & many of them achieved independence post WW II.

2) New superpowers like US & Russia emerged & old ones like UK declined because of exhausted economic resources & new polity infusion

3) ~~Multi~~ Start of Cold War between US & Russia to promote their respective policies of capitalism & socialism.
US → Marshall plan, USSR → Molotova plan

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4) Formation of military pacts like NATO (by US) & Warsaw Pact (by USSR) to further their interests by neo colonialism & political alliances

5) launch of NAM (by countries like India, Egypt etc) to maintain a neutral stance to both parties & establish regional autonomy & independence.

6) Formation of UN to promote virtues of inclusive growth, peace & conflict resolution via negotiation

7) Militarisation and use of weapons like nuclear weapons came into existence.

8) Rise of countries like Japan & Vietnam to assert their economic independence

9) Bretton Woods conference for establishment of organizations like WTO & World Bank for economic development & reconstruction

Thus, end of WW-II mainly led to emergence of superpowers like US & USSR which continued their fights via arms & space race.

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4. The Simla Agreement (1972) and Lahore Declaration (1999) are two key milestones in the history of the Indian subcontinent. Discuss.

(150 words) 10

शिमला समझौता (1972) और लाहौर घोषणा-पत्र (1999) भारतीय उपमहाद्वीप के इतिहास में दो महत्वपूर्ण उपलब्धियां हैं। चर्चा कीजिए।

Simla Agreement (1972) & Lahore Declaration (1999) were signed between India Pakistan post their respective conflicts to promote peace. They are important milestones in history of India.

Simla Agreement (1972)

1) Signed between Indira Gandhi & Bhutto, it led to establishment of India Pak border to maintain strict vigil & prevent encroachments.

2) Pakistan recognized Bangladesh as an independent state, thus fulfilling the dream of a free nation of their natives & an end to atrocities by Pakistan

3) India decided to give back Pakistan the territories won by it to promote peace & establish an image of big brother in Indian Subcontinent

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4) It led to establishment of UNMOGIP who now volunteered to help both nations to promote peace via mediation & arbitration

Lahore declaration (1999)

1) Signed between Vajpayee & Nawaz Sharif. it gave impetus to Vajpayee's Bus diplomacy to promote peace & inclusive growth.

2) It led to passing of resolutions to develop ceasefire across border & LOCs to protect lives of soldiers & natives.

3) Gave impetus to India's 'Neighbourhood first policy' to maintain friendly relations with its neighbours

4) Soon after it, the Kargil conflict started which eroded the value of this agreement widely.

Thus both Lahore Declaration & Shimla Agreement made India's image as a peace full country, ready to cooperate with other nations.

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5. Social security should not only involve economic empowerment but also social empowerment. Discuss in the context of India. **(150 words) 10**
सामाजिक सुरक्षा में न केवल आर्थिक सशक्तीकरण अपितु सामाजिक सशक्तीकरण भी सम्मिलित होना चाहिए। भारत के संदर्भ में चर्चा कीजिए।

Social security are the measures taken by society (or govt) to ensure better social conditions (like health, education) via payments for its citizens.

It involves both economic & social empowerment elements.

Economic empowerment

1) Social security measures provide financial inclusion services like PMJDY & JAM trinity to sustain income security for economic growth.

2) It promotes measures of skill development (like PMKVY) & minimum work guarantee (like MGNREGA) to increase labour productivity & sustain income.

3) Social security needs to be given via measures like DBT to reduce corruption & increase coverage.

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Need for social empowerment

- Poor health & education facilities
- Discrimination against women
- Rising old age people
- Migrants issues

Social security & social empowerment

1) Social security measures like 'Beti Bachao Beti Padhao' are needed to give impetus to women education & survival for their inclusive growth.

2) Schemes like NFSA & PDS give impetus to promotion of food security where 38% of children are stunted to promote nutrition security.

3) Old age people face issues of stereotypes & social segregation & hence schemes like IGNOAPS & Vayoshri Yojana are needed to promote their sustainabilance

4) PMGKAY for migrants to promote their

India is currently in a phase of demographic dividend & hence needs social security measures for inclusive growth.

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6. Explain with examples how globalisation is manifested in both local in the global and the global in the local. **(150 words) 10**

उदाहरण देते हुए स्पष्ट कीजिए कि वैश्वीकरण वैश्विक में स्थानीय और स्थानीय में वैश्विक, दोनों में किस प्रकार प्रकट होता है।

Globalization refers to integration of world into one economy & society to promote free movement of goods, capital, labour & services. It has manifestation of both local in global & global in local

Local in global

1) ~~How~~ Glocalization → Various fast food chains like McDonald & KFC serve Indian dishes & similarly other companies have promoted Indian goods for Indian citizens hence glocalization of culture has taken place where global caters to local.

2) Various ~~to~~ traditions like Ayurveda & Yoga have been promoted globally to ensure their maximum usage & hence an impetus to local practices

3) ~~Glocal~~ Indian movies are shown worldwide & similarly Indian products

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are sold worldwide (local made).

4) Concepts of Karma & Yoga Dharma have been imbibed in other cultures

Global in local

1) Homogenization → Cultures like Mc Donaldization, Walmartization have increased consumerism as being done globally to promote local development.

2) India is taking up western values like live in relationships, increasing divorce, same sex marriage etc. to promote human rights as done globally.

3) Women are taking up more jobs & getting better health & education facilities due to global impetus on promotion of basic human rights.

4) Multiple brands of companies being established due to LPG reforms & promotion of free trade worldwide

Hence globalization has impacted both global & local societies to promote cooperation & conflict between them

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

7. In light of persistence of various forms of violence against women in India, discuss the ways in which the issue can be addressed effectively.

(150 words) 10

भारत में महिलाओं के विरूद्ध हिंसा के विभिन्न रूपों की विद्यमानता के आलोक में, उन उपायों की विवेचना कीजिए जिनसे इस मुद्दे का प्रभावी ढंग से समाधान किया जा सकता है।

Women account for 48% of Indian population (Census 2011) but still face major brunt of violence issues when it comes to Indian society.

Reasons & forms of violence

1) Domestic violence → (a) Due to orthodox & patriarchial nature of Indian society due to lack of self determination

(b) High cases in rural areas where young widows who are at the mercy of their elders.

(c) Changing economic & social virtues of women earning higher than men which lead to such cases.

2) Sexual abuse of children → Due to issues like poverty, illiteracy, absence of rule of law, malnutrition & migration

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3) Workplace violence → Due to lax law implementation leading to decrease in women LFPR & rising cases.

4) Issue of son mole preference where women are forced to give more birth.

Ways to address

1) Legal measures →

(a) One Stop Centres by MoWCD to register complaint & ~~lack~~ take action

(b) NCW helpline on Whatsapp to provide instant relief & reheb.

(c) Domestic Violence Act 2005 & Dowry Prohibition Act

2) Societal measures →

(a) Community measures like 'Mpower Ion' & 'Ghonti Bajao' to promote gender sensitization & stop increase in cases.

(b) Mahila Shakti Kendras to promote awareness to women about their rights

3) Judicial measures by Delhi & J&K HC to stop rise in cases.

4) Education, gender sensitization & providing nutrition to women (via NNM) to stop women empowerment can lead to 8% increase in GDP & hence such cases should be stopped for their inclusive growth

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8. What is an urban forest? Highlight its benefits and steps taken by the government to promote urban forestry in India. **(150 words) 10**

शहरी वन क्या हैं? इनके लाभों और भारत में शहरी वानिकी को बढ़ावा देने के लिए सरकार द्वारा उठाए गए कदमों पर प्रकाश डालिए।

Urban forest refers to planting of trees & afforestation activities on urban & surrounding areas to promote social & environmental benefits.

Health benefits

1) It provides relaxation from stress which is quite prevalent in urban areas due to work pressure.

2) Clear oxygen & green cover save humans from various health diseases caused due to high temperature in urban area.

Ecological benefits

1) Urban forests act as carbon sinks to promote carbon sequestration & hence decrease emissions, subsequently mellifying global warming.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

2) Provide habitat to various species for their survival

3) Provide facilities of nutrient cycling, water purification & increasing soil fertility

Economical benefits

1) Provisioning services of food, water, medicines & wood to local natives for better income & nutritional security

2) It decreases energy usage (via ACs etc) & thus saves cost on energy consumption to promote green economy.

Ways to promote

- Nagar Van Scheme (200 hectares in 5 years)
- Following Pune's Wardha scheme model
- Rooftop forests (like in Chennai)
- Providing loans & subsidies to people

Other measures like Green Bonds for financing are also being taken up. India's forest cover stands at 24.5% & hence urban forestry could help us achieve 33% target to achieve sustainable development

Don't write anything this margin (इस भाग में कुछ ना लिखें)

9. How has globalization impacted the location of the IT industry?
(150 words) 10

वैश्वीकरण ने IT उद्योग की अवस्थिति को किस प्रकार प्रभावित किया है?

Globalization refers to integration & interconnectedness of world's society & economy to promote free movement of goods, capital, labour, services.

It has impacted IT industry in multiple ways.

Globalization impact

1) It has led to outsourcing of IT industry to cost effective nations like India to promote cost competitiveness

2) IT industry's location has sprung up various call centres in countries like India which provide employment to lakhs of youth.

3) It has led to integration of services across globe where a US consumer now talks to an Indian agent to get his issues solved.

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4) Various metros in India like Gurgaon, Mumbai, Bangalore have become IT hubs due to this phenomena.

5) The IT exports of India have increased due to various innovations in IT industry leading to greater forex & increased setting up of such centres.

6) New jobs of IT consultants in premier companies like Accenture have come up which provide specialized solution to their clients.

7) IT industries have led to policy of 'Work from Home' which is a by product of globalization to promote flexible working hours.

8) Migration towards urban areas for getting jobs in Indian IT industry stalwarts like Infosys & TCS, leading to greater prestige.

IT industry has been impacted in a major form by Globalization & hence India has become a leader in providing IT solution services

Don't write anything this margin (इस भाग में कुछ ना लिखें)

10. How can eco-tourism be used to sustainably harness the potential of tourism industry in India? Discuss the challenges and steps taken by the government in this context. **(150 words) 10**

भारत में पर्यटन उद्योग की क्षमता का संधारणीय रूप से दोहन करने हेतु पारिस्थितिकीय पर्यटन का कैसे उपयोग किया जा सकता है? इससे जुड़ी चुनौतियों और इस संदर्भ में सरकार द्वारा उठाए गए कदमों की विवेचना कीजिए।

Eco-tourism refers to tourism activities related to accessing pure nature & experiencing its healing & aesthetic capabilities away from urban towns.

Benefits of eco tourism

- Pure nature improves health
- Brings precious forex
- less cost of infra development due to naturalness
- Employment
- promotes local culture

Challenges faced

1) poor infra development (like roads, water, electricity) has led to decreased numbers of people opting for eco tourism
2) Problems of air & water pollution

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due to increased emissions & urbanization has led to decreased nature purity

3) Apathy of tourist guides & locals towards ~~tourists~~ tourists (specially foreigners) by charging them higher leading to dissatisfaction

4) Apathy of govt. to promote eco-tourism activities

5) Issue of encroachment of tribal rights via greater human access, which increases pollution also

Steps Taken

1) Schemes like Swadesh Darshan have tourist circuits comprising of eco tourist ones to promote eco tourism

2) Schemes like PRASAD & promotion of Yoga & Ayurveda to promote sustainance of infra & heritage in such places

3) Provision of schemes like Mahua drink to other people to promote tribal product usage (Vandhan, E Tribes) to increase prospects of eco tourism

4) Better infra development & strict vigil on guides, India's policies of 'Padharo Mhare Des' & use of celebrities like Aamir Khan (Atithi Bhagwan) are good step to promote eco tourism

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11. The advent of Buddhism and Jainism was instrumental in the development of architecture in ancient India. Discuss. **(250 words) 15**

प्राचीन भारत में स्थापत्य कला के विकास में बौद्ध धर्म और जैन धर्म का उद्भव सहायक रहा। चर्चा कीजिए।

Buddhism & Jainism were Shraman Tradition whose advent played a major role in development of architecture in ancient India.

Various architecture forms

- Stupas
- Chaityas
- Viharas
- Rock cut temples
- Caves
- Rock cut pillars

Architecture forms via Buddhism

1) Stupas → Various stupas like Bharhut, Sanchi etc. came up in ancient India which were the final resting place of Buddha & other monks. They had various Jataka stories on their walls

2) Chaityas → At places like Karle

Don't write anything this margin (इस भाग में कुछ ना लिखें)

which served as the meeting place of Buddhist monks with large pillared mandaps.

3) Viharas → At places like Junnar & Karle to serve as resting places for monks in rainy season.

4) Evolution of various schools of art

- Gandhara
  - → Grey Sandstone
  - → Buddha having Hellenistic features
- Mathura
  - → Red sandstone
  - → Images of Buddha, Kanishka
- Amravati
  - → White Standstone
  - → Imaged Buddha

5) Rock cut Temples like Mahabodhi temple by Ashoka

6) Caves like Ajanta & its paintings & structure like Padmapani advocated to Buddha.

7) Pillars (monolithic) for inscriptions

Jain architecture

1) Various images of Jain Tirthankaras (like Shravan Belgola) substantiated architecture forms in South

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2) Nagara temples like Palitana (Gujarat) & Delwara temples (Rajasthan) were put-up for worship of Jain tirthankaras.

3) Temples like Khajuraho (MP) which are a part of Khajuraho architecture (having intricate forms & erotic structures) were set up. Also rock cut caves in Orissa by Kharavela kings

4) Various basadis to ensure survival of travellers were established due to advent of Jainism.

5) Sun Temple at Modhera which shows maximum use of black sandstone, marble & water pond was also instrumental because of Jainism

6) Ellora cave architecture of tirthankaras

India's architecture adds glory to the nation & hence Buddhism & Jainism architecture forms were instrumental in it. They should be preserved via schemes like Swadesh Darshan & PRASAD to promote their development.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

12. The reactionary policies of Lord Lytton and the liberal policies of his successor Lord Rippon acted as catalyst in the formation of the Indian National Congress. Discuss. **(250 words) 15**

लॉर्ड लिटन की प्रतिक्रियावादी नीतियों और उसके उत्तराधिकारी लॉर्ड रिपन की उदार नीतियों ने भारतीय राष्ट्रीय कांग्रेस के गठन में उत्प्रेरक का कार्य किया। चर्चा कीजिए।

Lord Lytton & Lord Rippon's policies were quite in contrast to each other that played a significant role in formation of Indian National Congress.

Policies of Lord Lytton

- Vernacular Press Act
- Decreasing age for civil servants
- Illegal Arms Act
- Delhi Durbar during famine

Catalyst for INC

1) VPA 1878 → It had the worst features of suppressing press freedom via seizing of press if ~~to~~ seditious activities were found (in vernacular languages).

Catalyst → led to demand for press freedom & arrest of Surendranath

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Banerjee furthered these interests

2) Reduction of age of entry to civil services to 19 led to demands of raising it & hence acted as a catalyst

3) Arms Act (1878) led to seizure of arms of Indians & hence led to cries of maintaining the protection

4) Delhi Durbar during 1878 famine led to huge cry of wastage of public money & hence demand for better expenditure, leading to INC formation for this aspect.

5) Setting up of various organizations like Indian Association (1876 by Surendra nath Banerjee) & Madras Mahajan Sabha (1884) acted as further catalysts.

Policies of Lord Ripon

1) He negated the effect of VPA 1878 by removing it, hence gaining confidence of Indians about its atrocative nature & hence demands for press freedom.

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2) Ilbert Bill Act (1884) where Europeans could be tried by Indian judges had to be taken away due to English revolt. This acted as a catalyst for INC formation to ensure rule of law & justice to people.

3) Introduction of local self govt. policies by Lord Ripon promoted decentralization & hence strengthened cause of INC formation to assure power distribution to Indians.

4) Finally, INC was established in 1885 Bombay Congress Session by AO Hume & 72 other delegates to ensure a platform for raising public opinion, uniting masses following 'petition & prayer policy' to govt.

Thus, Lord Lytton & Lord Ripon's policies played a major role in establishment of INC as a centre of political activity by Indians to promote their development

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13. Gandhiji changed his methods of struggle against the British from time-to-time to suit the varied circumstances and problems that needed to be tackled. Analyse. **(250 words) 15**

गांधी जी ने विभिन्न परिस्थितियों और समस्याओं जिनसे निपटने की आवश्यकता थी, के अनुकूल समय-समय पर अंग्रेजों के विरूद्ध संघर्ष की अपनी विधियों में परिवर्तन किया। विश्लेषण कीजिए।

Gandhiji came to forefront of India's political scenario in 1915 & used various methods across time to tackle multiple problems based on circumstances.

Methods used by Gandhiji

- Non violence & Truth (Satyagraha)
- Non Cooperation
- Civil Disobedience
- Fasting to promote unity
- Harijan policies

Methods of struggle vis-a-vis Time

i) He organized Satyagraha Sabha to revolt against Rowlatt Act by peaceful means to ensure resilience to British via non violence.

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2) He organized his first Civil Disobedience in Champaran to revolt against Govt's orders & ultimately led to peace between farmers & Govt (by accepting 25% fees)

3) His first fasting was in Ahmedabad mill strike to persuade owners to give bonus to factory workers.

4) Usage of Non Cooperation in Khada Satyagraha (to demand plague bonus).

5) Launching of NCM to promote Hindu Muslim unity (via Khilafat movement) & protesting against govt by methods like boycott of councils, schools, colleges etc. Also novel methods of burning foreign cloth & popularization of Khadi to promote feeling of nationalism

6) Allowance to Swaraj Party to participate in Council elections to counter time of inactivity after NCM & ensuring peace within Congress.

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7) Launching of Civil Disobedience Movement by taking up issue of salt monopoly to ensure massive citizen participation (women, labour etc.) to achieve swaraj.

8) Giving go ahead to Congress Ministries for elections by GOI 1935 Act.

9) Working for issue of untouchability by establishing 'All India Anti Untouchability League' & lapping Communal Award Act. He signed Poona pact to avoid divide & rule policy of British via untouchables.

10) Finally, launching of Quit India movement & not minding little & controlled violence to achieve independence & communal harmony. Gandhiji, rightly called the 'father of the Nation' was hence instrumental in India's independence by his various means & methods of achieving it.

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14. Bring out the relationship between the industrial revolution and the advent of imperialism in different parts of the world. **(250 words) 15**
औद्योगिक क्रांति और विश्व के विभिन्न भागों में साम्राज्यवाद के आरंभ के मध्य संबंधों को स्पष्ट कीजिए।

Industrial revolution was the phase of industrial expansion & a rapid increase in trade which also led to advent of imperialism in different parts of world.

Features of Industrial Revolution

- UK becomes epicentre
- Better transport & communication
- Textiles revolution
- Change in agrarian pattern

Industrial revolution ⊖ Imperialism

1) Industrial revolution ~~player~~ laid a major emphasis on capitalism to promote ~~distribution~~ production for market & profits at any cost. This led to search

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for new markets & raw material sources leading to imperialism of countries like India & continents like Africa.

2) It marked a period of better transport & communication facilities (like steam engine, macadamized roads) which gave impetus to naval powers to search for new ~~lands~~ territories & colonize them.

3) Availability of cheap labour was much needed for cost efficiency & hence massive availability in India & Africa led to their colonization.
Ex: Plantations established in India (tea) & Brazil (cocoa).

4) Industrial revolution was marked with a period of Renaissance & hence major scientific achievements coupled with missionaries role helped in colonization

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5) Industrial revolution gave rise to feeling of nationalism in countries & hence gaining of colonies was seen as a matter of prestige

6) Imperialism led to integration of ~~work~~ economies of colonies (like India) with world economy which increased capitalists' profits (via investment in railways) to further their interests

7) Industrial revolution led to massive production of textiles, leading to better development of navies to capture colonies

8) Establishment of companies like EIC & Dutch EIC were because of industrial revolution which ultimately led to increased colonization

Hence the advent of Industrial Revolution & imperialism are interlinked & present a major revolutionary moment in world history.

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15. The caste system in India has continued to persist by adapting itself to a variety of changing socio-economic and political conditions in the past few decades. Discuss. **(250 words) 15**

भारत में जाति व्यवस्था विगत कुछ दशकों में परिवर्तित होती विभिन्न सामाजिक-आर्थिक और राजनीतिक स्थितियों के अनुरूप अपने आपको ढालकर विद्यमान है। चर्चा कीजिए।

Caste system in India is a collection of beliefs & values that legalize the inequalities present in Indian society.

In the present, it has adopted various socio-economic & political changes but still continues to persist.

Features of Caste System

- Segmental division of society
- Separation of contact
- Hierarchy
- Endogamy
- Untouchability

Changing caste system by socio-economic conditions

1) Sanskritization → Adoption of higher caste virtues by lower caste to achieve caste equality & reduce discrimination.

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Ex: Taking bath early in morning.

2) Westernization → Solidification of caste as class due to economic inequalities as a major factor.

3) Urbanization → Reduction of concept of purity & pollution by means of increased transport & inter caste dining

4) Industrialization has further reduced concept of caste to class system.

5) Taking up of jobs ~~of~~ by lower caste people (IT jobs) & promotion of inter caste marriages has further degraded caste system.

Political conditions
- Increase in secular parties
- Giving tickets to all
- Reservation

Persistence of caste

1) Personal laws → People still try to choose their friends, cooks & partners

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of same caste.

2) Political policies of caste reservation (Art 16(4) & 16(4)(a)) & formation of political parties based on caste has given new dimension to caste mobilization

3) Manual scavenging still exists due to caste segregation & lack of skill development of scavengers.

4) Formation of pressure groups based on caste has given a new dimension to caste politics & increased conflicts.

5) We see a rise in number of caste associations which act as social means of promoting caste endogamy by organizing annual dinners & marriages.

Hence, the caste system has persisted by changing its dimensions but should be used for promoting positive discrimination to maintain national unity.

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16. It is argued by some that regionalism is a threat to national integrity while others consider it as a highly impactful tool in facilitating political participation. Discuss. **(250 words) 15**

कुछ लोगों द्वारा यह तर्क दिया जाता है कि क्षेत्रवाद राष्ट्रीय अखंडता के लिए एक खतरा है, जबकि अन्य लोग इसे राजनीतिक सहभागिता को सुगम बनाने में एक अति प्रभावशाली साधन मानते हैं। चर्चा कीजिए।

Regionalism refers to the notion of placing development of region above other values to promote inclusive development. It has come ~~at~~ both as a boon & bane in India's political, cultural & economic scenario.

Present facets of regionalism

- Secessionist movements
- Linguistic movements
- Reorganization of states
- Sons of Soil
- Economic & cultural development

Threat to national integrity

i) Secessionist movements → Issues of Khalistan & Greater Naga show that irrational demands of such regions can promote parochialism & negative regionalism.

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2) Linguistic movements like Andhra Movement (1953) can lead to threat of integrity due to demands by other states based on language.

3) Inter state border disputes (like Belgaum dispute b/w Maharashtra & Karnataka) & inter state river conflicts (Kaveri, Mahadayi) have increased due to rise in regional aspirations.

4) Promotion of concepts like 'Sons of Soil' & Gujarat exoduss to promote jobs for citizens have also posed a major threat to integrity.

Regionalism as political participation

1) Positive demands of regions like Vidarbha to promote economic development has benefitted their governance & administration

2) Establishment of Schedule V & VI for governance of tribal areas has

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given them autonomy (via ADCs) & promoted decentralization

3) Special status to states (via Art 371) has given impetus to states to promote political participation & better development

4) Issues of economic backwardness & culture delineation (like Gorkhaland) can be solved by giving more powers to GTA & ensuring no discrimination.

5) Regionalism has promoted better participation, governance & communication with govt. with greater benefits to linguistic states. As language serves as a unity factor for people.

6) Helped in emotional integration of India

Regionalism can prove to be a boon for India & should be utilized carefully (by councils like NIC) to promote sustainable development of Indian citizens

Don't write anything this margin (इस भाग में कुछ ना लिखें)

17. Natural gas has become an important primary energy source and its consumption is projected to increase further. Identify various usages of natural gas and give a brief account of its distribution globally.

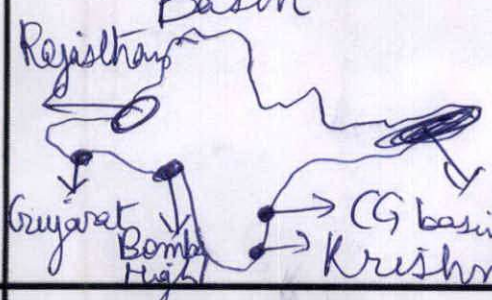
(250 words) 15

प्राकृतिक गैस एक महत्वपूर्ण प्राथमिक ऊर्जा स्रोत बन गया है तथा इसके उपभोग में आगे और वृद्धि होने का अनुमान है। प्राकृतिक गैस के विभिन्न उपयोगों की पहचान कीजिए और विश्व स्तर पर इसके वितरण का संक्षिप्त विवरण दीजिए।

Natural gas accounts for 6.4% of India's energy economy & can prove to be a major game changer in future for achieving energy sustainability

Global distribution of natural gas

- US gas wells
- Middle East
- Africa
- India
  - Cambay Godavari Basin
  - Krishna Basin
  - Assam
  - Gujirat
  - Rajasthan (Barmer, Jaisalmer)
  - South China Sea



NE region (Assam)

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Usages of natural gas

1) It is a clean source of energy with minimal emissions & hence can promote concepts of clean energy & green economy.

2) It can be transported easily via pipelines specially to geographically inaccessible places, thus promoting regional balanced development.

3) Its extraction is easier compared to other sources like shale gas & hence surface sedimentary rocks can promote its extraction.

4) It is cost effective & flexible to use as it doesn't face issues of power backdown (as in coal) & hence maximum efficiency can be achieved

5) It can give rise to sustainable employment as opposed to practices of rat hole mining to ensure better health

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for people & less environment degradation
4) Can be used across vehicles, cylinders, compressors etc.

Ways to ↑ Further increase in consumption

- INDC targets (40% renewable
- Clean environment demands
- Growing energy
- Declining usage of coal & oil

Issues with renewable energy
(High cost, more area needed, deforestation & displacement, waste mgmt)

Ways to promote

1) North East India Gas Grid to connect NE India by pipelines by 2030.
2) Other pipelines like JHGDPL for achieving similar goals.
3) Subsidies on gas usage & facilities for extraction

India has a target of being a gas based economy with 15% contribution by 2030 & natural gas will help us achieve this target.

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18. Describe the process of rift valley formation, with special emphasis on the Great Rift Valley System. **(250 words) 15**

महान भ्रंश घाटी प्रणाली पर विशेष बल देते हुए, भ्रंश घाटी के निर्माण की प्रक्रिया का वर्णन कीजिए।

Rift valleys are spaces formed between two ~~valleys~~ landforms due to various geomorphologic processes ~~and~~ which contribute to river drainage & tectonic stability.

Process of formation

Great Rift Valley System in Africa is a good example of rift valley formation

Formation of rift valley

1) Earth's lithosphere comprises of plates which undergo process of convergence & divergence.

2) Across rift valley Great Rift Valley system, ~~there~~ the plates have undergone divergence where continental-ocean plate divergent boundary is formed.

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3) Due to this divergence, new crust has been formed at the floor which is a cavity being filled by lakes in Africa

4) The denudational processes of weathering & erosion have led to creation of steep boundaries on either side of diverged boundary.

5) Due to sediments carried by water bodies & their subsequent erosion, the steepness of depression keeps on reducing.

6) It reduces till it acquires a stable V shape which ultimately leads to formation of Great Rift Valley system.

Examples & effects

1) Rift valley system in India (like Narmada & Tapi) have ranges like

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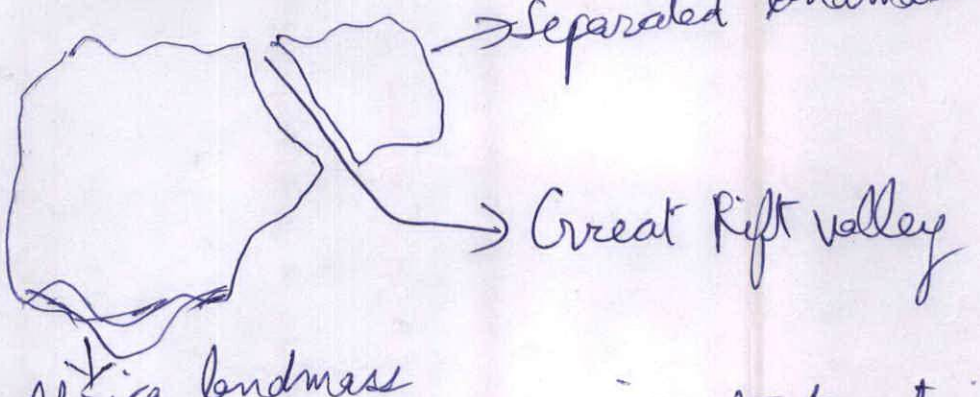
Amarkantak plateau which promote radial drange pattern to concretize the boundary of rift valley.

2) Great Rift Valley system in Africa ~~has~~ is an ongoing process & will ultimately lead to development of a separate landmass & continent & more vulcanism

3) Rift valley system in Deccan plateau over basaltic rocks provide dendretic drainage pattern for river flow.



Rift Valleys play an important part in drainage pattern of a nation & give an indication of continental drift theory in future.

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19. India's water resources have witnessed rapid depletion due to a mix of economic, geographic, and political factors. Explain and discuss its implications. **(250 words) 15**

भारत के जल संसाधनों में विभिन्न आर्थिक, भौगोलिक और राजनीतिक कारकों के संयोजन के कारण तेजी से ह्रास देखा गया है। स्पष्ट कीजिए एवं इसके निहितार्थों की विवेचना कीजिए।

CWMI index accounts for 120th rank of India out of 122 nations which clearly signifies the degradation & depletion of water resources in India.

It has been due to a mix of economic, geographic & political factors.

Economic factors

1) Overuse by agriculture → 85% of fresh water resources are used by agriculture leading to massive depletion

2) Inefficient irrigation activities like flood irrigation & have further depleted water resources.

3) Maximum use by domestic & industrial sources with no sewage & dismal waste treatment capacity have further declined water tables in cities.

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Geographic factors

- Climate change (Droughts & floods)
- GLOF
- Delayed monsoon (El Nino)
- Absence of perennial rivers in Deccan region

Political factors

1) Inter state river conflicts (like Cauvery, Mahadayi) have led to decreased water usage & no benefits to anyone.
2) No proper implementation & upkeep of rainwater harvesting resources & tanks
3) Problems of introduction of 'Water Conservation Fee' fearing the protests by farmers & industrialists

Implications

1) Drinking water scarcity leading to malnutrition & poverty
2) Decreased usage by agriculture leading

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to food insecurity & poverty.

3) Rise in conflicts in urban areas & amongst states over river water resources

4) Water bodies act as cooling agents, purifiers & biodiversity keepers. All of these services are in danger.

5) Increased mortality of people & drought & floods leading to impoverishment.

Ways to solve

1) Integrated Watershed management by implementing policies like Neeranyal & PMKSY → AIBP, On Farm Water Mgmt, IWMP

2) Use of drip irrigation by farmers

3) Rainwater harvesting & construction of tanks & Johads to conserve water

4) Tech solution (STPs) for waste water treatment.

5) Remote sensing & mapping by GIS

India's groundwater resources in cities are likely to be exhausted by 2022 & hence water conservation should be over top priority for achieving SDGs.

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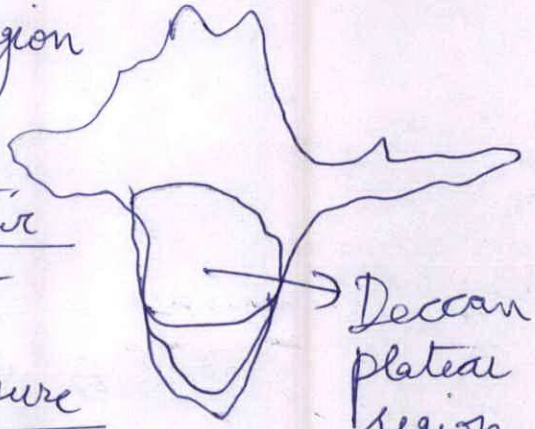
20. How are plateaus formed? Also, briefly discuss the features of the Deccan plateau and its economic significance. **(250 words) 15**

पठार का निर्माण कैसे होता है? साथ ही, दक्कन के पठार की विशेषताओं और इसके आर्थिक महत्व की संक्षेप में विवेचना कीजिए।

Plateaus are formed by a constant play of exogenic & endogenic processes. The Deccan plateau of India hence accounts for variable features along with increased economic significance.

Formation of plateau

1) Deccan plateau region contains many sedimentary & basaltic rocks beneath it that promote fissure activity to release lava (upwelling of magma & extrusion of lava)



2) Divergent boundary between Australian subcontinent & Indian plate led to migration of plate towards Asia

3) After collision, exogenic forces (by wind, water) like weathering & erosion led to

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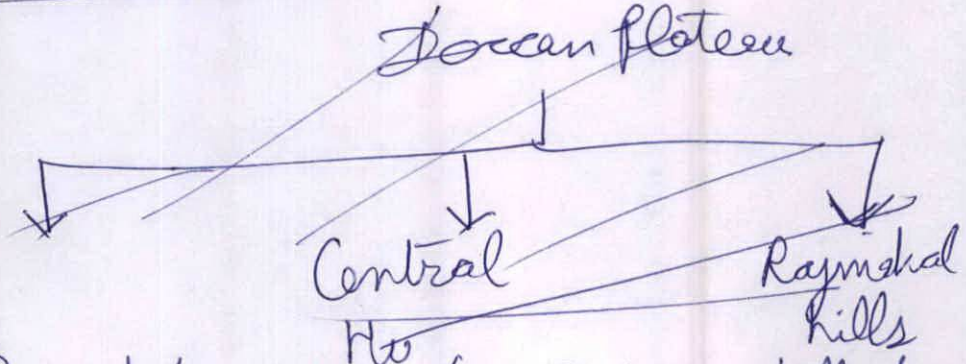
denudation of mountain feature of plateau, decreasing their ~~hgt~~ ~~hog~~ heights & giving a rock shaped structure

4) Subsidence of western.

Feature of Deccan plateau

1) Subsidence of western flank & Emergence of eastern flank.

2) A slight tilt from west to east direction.



3) Bounded above by Satpura hills & Maikal range & in south by Nilgiris & Annamalai range.

4) Western Ghats (in west) run from Maharashtra to Kerala & ~~promote~~ Eastern Ghats from Orissa to ~~Ka~~ Tamil Nadu

5) Rivers like Krishna, Cauvery originate in Western Ghats.

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6) Peaks like Anaimudi exist in Deccan Plateau & Western & Eastern Ghats meet at Nilgiri range.

Economic significance

1) Storehouse of minerals → Like Iron, Manganese, Cobalt etc. that promote mineral & energy security to country.

2) Ports across India (like Mumbai, Marmagao etc.) promote economic development via exports.

3) Oil & gas explorations in basins like Cauvery & Krishna further promote energy security

4) Variety of national parks (like Bandipur) & wildlife sanctuaries to promote tourism & products from forests (MFP) & hydel power

5) Hub of IT sector (Telangana, Bengaluru) which provide major service exports of India.

Deccan plateau thus is a valuable geographical structure of our country & should be preserved well to promote sustainable development of all.

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GENERAL STUDIES (TEST CODE : 1524)

Name of Candidate	Divyanshu Choudhary		
Medium Eng./Hindi	English	Registration Number	564612
Center	Jaipur	Date	23/12/20

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
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18	15	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

erall Macro Comments / feedback / suggestions on Answer Booklet:

All the Best

Don't write anything this margin (इस भाग में कुछ ना लिखें)

1. Tenancy reforms are much needed to give a boost to the Indian agricultural sector. Comment. In this context, also discuss the significance of the Model Land Leasing Act, 2016. **(150 words) 10**

भारतीय कृषि क्षेत्रक को बढ़ावा देने के लिए काश्तकारी सुधारों की अत्यंत आवश्यकता है। टिप्पणी कीजिए। इस संदर्भ में, मॉडल भूमि पट्टा अधिनियम, 2016 के महत्व की भी विवेचना कीजिए।

Tenancy reforms are responsible for protection of rights of both landlord & tenants for maintaining a cordial relation between them. They are much needed to boost productivity in India where 86% farmers are small & marginal.

Benefits of Tenancy reforms

- Boost agri productivity
- Reduction of poverty
- Equality
- Self Reliance

Land Model Leasing Act 2016

- legalising land leasing
- Prevents adverse possession of land
- Automatic resumption of ownership
- Terms of land leasing

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Significance

1) The act provides terms of land leasing by means of specific contract to promote rule based behaviour & increase investment

2) It provides social security to tenants by means of negation of eviction & regulation of rent to ensure their rights remain safe & landlord can't encroach them & vice versa.

3) Automatic resumption of ownership provides timelines for increasing agricultural efficiency by investment via inputs like seeds, fertilisers etc.

4) It provides means for occupational diversification as work hours are limited by contract & hence tenants can utilise remaining them for other works.

Dalwai committee report envisages a target of doubling farmers income by 2022 & land leasing & tenancy reforms will ensure its achievement

Don't write anything this margin (इस भाग में कुछ ना लिखें)

2. Identify the various challenges that have restricted the entry of Indian MSMEs into the foreign market. Also mention some government initiatives that have been taken to facilitate MSME exports. **(150 words) 10**

विदेशी बाजारों में भारतीय MSMEs के प्रवेश को बाधित करने वाली विभिन्न चुनौतियों की पहचान कीजिए। साथ ही, MSME के निर्यात को सुगम बनाने के लिए सरकार द्वारा की गई कुछ पहलों का भी उल्लेख कीजिए।

MSMEs form the backbone of Indian economy and account of 29% of India's GDP & 45% of exports. Still they face some issues in accessing foreign market

Issues faced by MSMEs

1) Lack of capital base

- Poor credit history
- Lack of asset base
- Issues of NBFCs (asset liability mismatch) to provide funds
- Lack of access to digital financial inclusion

2) Poor technology base & unskilled labour prohibits enhancement in productivity to access foreign markets.

3) High logistic cost & low availability of marketing opportunities to informal sector hinders access to foreign markets.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4) Poor managerial avenues & lack of social security to workers.

Initiatives by govt

1) Categorization of MSMEs based on investment & turnover

- Micro (I < 5 Cr, T < 50 Cr)
- Small (I < 10 Cr, T < 50 Cr)
- Medium (I < 50 Cr, T < 250 Cr)

2) Collaborating with World Bank to provide $750 mn capital base for access to finance.

3) TReDS & GeM portal to ensure procurement of MSME products & marketing of same

4) Atmanirbhar Bharat Abhiyaan to promote decentralized localism & supply chain for MSMEs

5) 59 min loan portal for easy access to finance in < 59 min

6) Subsidies for machines & skilling via PMKVY

MSMEs are crucial in achievement of $5 trillion economy by 2025 & hence should be integrated with the global supply chain for the same.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. India's march towards inclusive growth and it achieving the Sustainable Development Goals are intricately linked. Discuss. (150 words) 10
समावेशी विकास की दिशा में भारत की प्रगति और संधारणीय विकास लक्ष्यों की प्राप्ति जटिल रूप से जुड़े हुए हैं। चर्चा कीजिए।

Inclusive growth refers to pro poor growth where poor people act as both beneficiaries & participants in growth process. Its achievement along with SDG goals are crucial for rise of Indian economy.

Facets of Inclusive growth

- Poverty alleviation
- Employment
- Agriculture development
- Sustainability
- Women empowerment
- Reduction of inequalities

Inclusive growth ⟺ SDG goals

1) Inclusive growth focuses on poverty alleviation by means of anti poverty programmes like MGNREGA & PMJDY which will help in income security & achievement of SDG 1 by 2030.

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2) Provision of schemes like ONORC & NNM to ensure food & nutritional security to people for better health prospects for SDG 2. Similarly Ayushmaan Bharat & NHP

3) Inclusive growth seeks to reduce gender discrimination & hence by schemes like 'Beti Bachao Beti Padhao' & Surangla Yojana we ensure better health & educational prospect for women.

4) Education prospects to ensure better employment for all are necessary for achievement of SDG 4. Hence by schemes like RTE, MDM & New Education Policy, we seek to achieve inclusivity in education

5) Inclusive growth also focuses on sustainability & hence our constant endeavours for promotion of circular economy & use of electric vehicles (NEMMP) is an endeavour of Inclusive growth is of utmost importance to be $1Tn economy by 2025 & achievement of SDG goals by 2030.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Highlight the need for evolving an appropriate system of Rules Of Origin in regional trading arrangements. What steps have been taken by India recently in this regard? **(150 words) 10**

क्षेत्रीय व्यापार व्यवस्थाओं में उत्पत्ति के नियमों की एक उपयुक्त प्रणाली विकसित करने की आवश्यकता पर प्रकाश डालिए। हाल ही में, भारत द्वारा इस संबंध में क्या कदम उठाए गए हैं?

Rules of Origin refer to the rules that specify nationality & content of imported products to deal with the issues of dumping & quality. They are of utmost importance in today's world.

Need for evolution of ROO

1) To levy anti dumping duties & apply preferential rates at product based on their nationality & content.

2) To facilitate govt procurement of better quality products to ensure economic efficiency

3) To prevent cases of dumping by countries like China to keep in checking increasing trade deficit ($50 bn)

4) To maintain trade statistics to ensure documentation of imported products.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

5) To specify labelling of products for their better use.

Steps taken by India

1) CAROTAR rules to specify the content & origin of products to prevent round tripping & dumping.

2) Public procurement Order Amendment Act 2017 to ensure check on foreign companies' products by means of certification & constant check on shipment worth >xxxx

3) Specifying ROO & maintaining databases by segregation of companies based on application of normal & preferential duty structures.

Quality products are of immense importance in promotion of economic efficiency & growth & hence rules of origin ensure that in the long run.

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5. MSP regime is a creation of an era of scarcity in the 1960s. Discuss its relevance in the current era of surplus agricultural production.

(150 words) 10

MSP व्यवस्था 1960 के दशक के अभावग्रस्तता के युग का एक आविष्कार है। अधिशेष कृषि उत्पादन के वर्तमान समय में इसकी प्रासंगिकता की विवेचना कीजिए।

MSP regime was established to provide income security to farmers in case of crisis but today its relevance has changed a lot in era of surplus production

MSP regime should be maintained

1) 86% of farmers are small & marginal farmers that need income support to sustain production

2) Neglect of rural market & exploitation by intermediaries (as in case of APMC) demands MSP to be paid to farmers.

3) Declining soil fertility & non availability of mechanization ~~is at~~ are responsible for decreasing productivity in rainfed areas, thus need for MSP

Relevance in era of surplus production

Don't write anything this margin (इस भाग में कुछ ना लिखें)

1) At the same time, due to availability of better seeds (HYV) & fertilizers via Green Revolution, MSP demands a change specially for rich farmers.

2) MSP has led to wastage of resources & crop intensification (water by rice) leading to issues of distorted cropping pattern & water pollution.

3) MSP subsidies create issues of huge fiscal burden (fiscal deficit) on govt, leading to crowding out of private investments because of higher borrowing.

4) Contract farming introduction in many areas has led to better prices than MSP leading to decreased relevance.

Maintaining balance
- → Directing MSP for SM farmers
- → Betterment of APMC markets (as per Agri Produce Act)
- → Better linkages
- → MSP for all crops (millets)
- → MSP should be paid as per Swaminathan Commission recommendation (C2+FD) to double income by 2022.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

6. Examine the link between the recent locust attack and climate change. (150 words) 10

हाल ही में हुए टिड्डियों के हमले और जलवायु परिवर्तन के मध्य संबंध का परीक्षण कीजिए।

Locusts are grasshoppers that can leave a damaging ~~of~~ impact on environment. The recent case of worst locust attack in last 25 years is a testimony of the linkage with climate change.

Linkage between locust attack & climate change

1) locust attack ~~was~~ began due to favourable weather conditions in Horn of Africa which was a result of climate change.

2) Excessive warming of Arabian Sea due to absence of wind shear & prevention of water mixing (high temp) led to +ve IOD, favouring locust attack.

3) Wind movement is a passive way of carrying locusts which has changed in recent times due to rises of black

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carbon creating pressure differences in Indian Ocean (albedo feedback), leading to westward movement of locust.

4) Intensification of cyclones (like Amphan in Bay of Bengal) due to rising temperatures & increased coastal vulnerability (deoxygenation & acidification) favoured locust attack.

5) Ecological degradation due to land desertification compels locusts to search for food leading to locust attack.

6) Sea level rise favours presence of locusts which has happened due to extensive saltwater intrusion & ocean warming & acidification.

Ways like artificial sprays & biopesticide can be helpful in controlling locust attacks but achieving climate sustainability (SDGs goal by 2030) is the prime factor for its control.

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7. Highlighting the properties of Carbon Nanotubes, discuss its applications. (150 words) 10

कार्बन नैनोट्यूब्स के गुणधर्मों पर प्रकाश डालते हुए, इसके अनुप्रयोगों की विवेचना कीजिए।

Carbon Nanotubes refers to the carbon structures where atleast 1 dimension is in the range of nanometres (~100nm). They have a widespread range of properties & applications.

Properties of Carbon Nanotubes

1) Physical properties → They are the best conductors of heat & electricity (like graphene) along with low weight.

2) Chemical → They can react with various elements & can also act as catalyst for several reactions.

3) Allotropism is shown by Carbon Nanotubes as they change forms.

4) Optical properties → They behave as translucent to incoming light which also has many benefits.

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Applications of CNTs

1) Medical → CNTs are widely used for targeted drug delivery ~~& appl~~ (like nanopatches & dendrimers) & applying incisions & maintaining drug concentrations

2) Help in energy storage in various batteries to achieve high energy density

3) They are widely used in touchscreen phones due to their flexibility.

4) Usage in photovoltaic cells due to high electrical & thermal conductivity

5) Used for making nanorobot which can have defence applications of surveillance, reconnaissance & mapping of border terrains.

6) They are used in place of Aluminium foil to maintain heat of stored food.

Carbon Nanotubes are the next revolution in history of science & Nano Mission 2007 of India looks to maximise their use for achieving better results.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

8. India's domestic patent regime privileges public health over pharmaceutical industry's interests. Comment. (150 words) 10
भारत की घरेलू पेटेंट व्यवस्था औषध उद्योग के हितों पर सार्वजनिक स्वास्थ्य को विशेषाधिकार प्रदान करती है। टिप्पणी कीजिए।

India's domestic patent regime has a ~~ref~~ relationship of conflict, containment & cooperation between public health & pharmaceutical industry's interests.

Priveleging public health over pharma

1) TRIPS flexibilities have been incorporated in India's patent regime to provide for the same.

2) Compulsory Licensing mechanism permits production of patented drugs of pharma industry by govt. without permission of patent holder.

3) Parallel importation allows import of certain drugs & devices for public health with or without permission of patent holder.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4) Commercialization part of IPR policy 2016 is liable for restrictions on basis of public health privilege over pharma industry patents.

5) Need of developing countries (as LDCs mentioned in Doha Agreement of WTO) allows India's domestic patent regime to have an upper hand.

6) Use of patents by pharma for personal benefit leading to scrupulous prices.

Equality of both

1) New initiatives like CIPAM & LPRO (by DPIIT & Qualcomm) allows better patent usage by pharma industry to maintain better relations

2) IPR policy 2016 needs a revamp to ensure better protection of pharma industries.

India has 7th largest no. of patents being filed (as per WIPO) and hence should focus on establishing a better regime for pharma industry.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

9. Bring out the arguments surrounding the idea of employing the principle of 'one border - one force' on Indian borders. **(150 words) 10**

भारतीय सीमाओं पर 'एक सीमा-एक बल' के सिद्धांत का उपयोग करने के विचार के चतुर्दिक व्याप्त तर्कों को स्पष्ट कीजिए।

India's border management concern needs a major revamp to ensure better political sovereignty & territorial integrity. The principle of 'one border one force' is in coherence with it.

Arguments for one border one force

1) Clear chain of command to maintain peace across border (as BSF in Pakistan) for better border management.

2) One force will be effectively able to use its expertise & rely on technology (like CIBMS in Bangladesh) for better results.

3) Prevents issues of lack of coordination across multiple borders (like Assam Rifles at China & Myanmar) thus decreasing work load & better social security to soldiers.

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4) It will lead to better interaction with locals to promote cohesive border management.

5) Better border infrastructure development (like by BRO) to achieve strategic mobility across borders.

6) Better control of issues of insurgency & tackling of money laundering & trafficking

Issues with OBOF

- Need of too many forces due to multiple borders
- Can lead to border monopoly prohibiting innovation
- Nexus with non state organizations
- Reduces checks & balances w.r.t other forces

Ways to solve

i) Use of technology like CIBMS to promote state of art surveillance

2) Use of ITCs to establish coherence b/w forces for better border management

India's security at borders is of a prime concern & concept of OBOF should work in coherence to achieve that

Don't write anything this margin (इस भाग में कुछ ना लिखें)

10. Assess the need to create a new cadre of Indian Frontier Administrative Service to undertake the vital tasks at Indian frontiers. **(150 words) 10**
भारतीय सीमांतों पर महत्वपूर्ण कार्यों को संपादित करने के लिए भारतीय सीमांत प्रशासनिक सेवा का एक नया संवर्ग बनाने की आवश्यकता का मूल्यांकन कीजिए।

There are growing demands for creation of Indian Frontier Administrative Service to perform vital activities at Indian frontiers. It comes with its own set of opportunities & challenges.

~~Opp~~ Need for IFAS

1) Lack of manpower at Indian frontiers to deal with issues like cross border trafficking & laundering.
2) Multiple units guarding various frontiers has led to confusion in establishing a chain of command.
3) Adherence to technology is at low levels which can be solved by expertise ~~of~~ provided by IFAS.
4) IFAS will be able to cohesively

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involve locals for holistic development

5) International experience (like China & US) having a separate Frontier Service Cadre demands the same.

No need of IFAS

1) ~~No~~ Another layer of bureaucracy will be added which can increase issues of corruption & red tapism

2) Financial pressure on govt. to open up a new service & train the cadre.

3) Current frontier forces are well versed with challenges & newly recruited IFAS officers might not have a true picture of ground reality

4) Geographical expanse of India is not much.

The above issues can be solved by better frontier practices (border management by CIBMS) & international coordination (like Djibouti Code of Conduct) to cater to issues of frontier

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11. The main objective of Union Budget 2020-21 is to provide "Ease of Living" to all citizens. Analyse the framework proposed in the Budget 2020-21 to achieve this objective. **(250 words) 15**

केंद्रीय बजट 2020-21 का मुख्य उद्देश्य सभी नागरिकों को "ईज़ ऑफ़ लिविंग" (जीवन सुगमता) प्रदान करना है। इस उद्देश्य को प्राप्त करने के लिए बजट 2020-21 में प्रस्तावित ढांचे का विश्लेषण कीजिए।

Union Budget 2020-21 is a revolutionary step in promotion of 'Ease of Living' to all citizens for achieving sustainable development. The proposed framework is necessary for achievement of this objective

Framework proposed

1) Better income security to citizens by terms of relaxation in Personal Income Tax to promote income security

2) ~~Bet~~ Abolition of DDT to achieve better ~~use~~ resource usage by companies for India's corporate growth

3) Subsidies given on schemes like PMAY & new schemes like ARMC &

Don't write anything this margin (इस भाग में कुछ ना लिखें)

NLMC to promote land usage.

4) Setting up of more Smart Cities to promote better infrastructure & social facilities to citizens.

5) National Infrastructure Pipeline (worth ₹ 102 L cr by 2025) for achievement of $5 trn economy by 2025.

6) Doubling of credit limit of Ayushman Bharat & inclusion of new categories (like startups) under PSL to promote better credit to health & education sectors

Analysis of this framework

1) Tax relaxations will help in increasing income security to citizens coupled with increase in tax to GDP ratio & tax buoyancy.

2) New concepts like ARHCs & NLMC will help in utilization of excess land lying vacant with govt.

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3) This will help in better land marketability & ~~better~~ entrepreneurship in land market to solve issues of housing (under PMAY to provide 1.2 cr houses by 2011)

4) Establishment of more smart cities will lead to better renewal & retrofitting. This will also provide better waste management, sanitation, mobility (e vehicles) facilities to facilitate ease of living

5) Increase in budget of SBA (₹1.4 Lc) & inclusion of solid (plastic & Gobardhan) & liquid (greywater) waste management to promote sanitation

6) NIP will help provide better infra & connectivity to markets that will help raise production levels to achieve income security.

India poises to be ₹1 tn economy by 2025 & global superpower by 2030 & 'Use of Living' document is in coherence with same.

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12. Several challenges are needed to be addressed to realise the full benefits of the recent agricultural marketing reforms. Discuss. **(250 words) 15**
हालिया कृषि विपणन सुधारों के पूर्ण लाभों को साकार करने के लिए अनेक चुनौतियों का समाधान करने की आवश्यकता है। चर्चा कीजिए।

Agricultural marketing refers to the activities necessary for reach of agri products from producers to consumers. It comes with its own set of challenges to fully realise benefits of recent reforms.

Recent reforms in agri marketing

- Agriculture Trade & Pricing (APMC) Act
- Contract Farming Act amendment
- ECA 1955 amendments
- Creation of AIF
- AHIDF

Challenge to be addressed

1) Low levels of mechanization productivity has created supply bottlenecks to achieve better results.

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2) Low mechanization level & high cost of logistics further hamper spirit of these reforms.

3) Neglect of rural markets & exploitation by intermediaries (as in case of APMC) further aggravates the situation

4) Infrastructural bottlenecks in terms of non existing cold chains, MFPs & supply infrastructure leads to food wastage which should be addressed.

5) Lack of warehousing facilities & testing & packaging facilities

6) Corruption in APMCs by officials & in contract farming & cartelization of traders & contractors

How to utilise present reforms

1) APMC Act amendment needs to be replicated in both trade areas & APMC mandis to achieve parity.

2) Strengthening of eNAM facility

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across all markets to achieve transparent auction & marketing facilities.

3) Contract farming amendment should be implemented cohesively with MSP regime to remove fear of MSP removal & ensure better price realisation.

4) ECA 1955 amend
4) Also Contract farming amendment should specify written contracts along with price mention & better dispute resolution facilities

5) ECA amendments should try to stick to given products only during war & crisis times to prevent hoarding & black marketing.

6) Creation of AIF will ensure implementation of post harvest infrastructure & preserving community assets.

Dalwai committee report recommends doubling of farmers income by 2022 & better agri marketing reforms (like Operation Green & PMKSY) will help in its achievement

Don't write anything this margin (इस भाग में कुछ ना लिखें)

13. Multimodal transport requires multiple integrations across different modes of transportation. Substantiate. What are the challenges and opportunities associated with multimodal transportation for India? **(250 words) 15**

बहुविध परिवहन (मल्टीमॉडल ट्रांसपोर्ट) के लिए परिवहन के विभिन्न साधनों के मध्य विविध रूप से एकीकरण की आवश्यकता है। पुष्टि कीजिए। भारत के लिए बहुविध परिवहन से जुड़ी चुनौतियां और अवसर क्या हैं?

Multimodal transport refers to integration of various modes of transport (like land, sea & air) to achieve cost efficiency & economic growth. It also has its own set of challenges & opportunities

Multimodal transport

1) Multimodal transport combines achieving both last mile connectivity along with faster turnaround time & cost efficiency.

2) It integrates various transport modes ~~to~~ across various nodes based on individual efficiency parameters based on geographical terrain.

Challenges of multimodal transport

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1) Major transport activities occur across roads due to last mile connectivity but the

2) High logistics cost in road transportation as compared to railways & waterways.

3) Minimal utilization of waterways (just 1.6% of 14500 km) due to poor infrastructure & diversion to fields along with issues of slow speed & water pollution.

4) Decreasing share of railways in modal freight carriage (35%) & increase in operating ratio (96.4%) has led to increase in cost which prohibits its use

Opportunities in multimodal transportation

1) India's waterways can be utilized to maximum & schemes like National Waterway Act 2016 & Jal Marg Vikas project across NW1 plans to

Don't write anything this margin (इस भाग में कुछ ना लिखें)

integrate transport modes.

2) Establishment of freight villages (like in Varanasi) & Ro-Ro terminals will ensure modes that decrease cost & increase transport efficiency.

3) Tariff rationalization & privatization of railways are golden opportunities to extract benefits of railways which are the 4th largest goods carrier in world.

4) Road transport can be improved by better connectivity & engineering designs

5) Schemes like RCS & Udan can integrate air services to achieve full fledged multimodal transport.

6) Building of warehouses & infra along waterways (as per NIP) can further give better results.

India's achievement of $1tn economy by 2025 depends on multimodal transport which should be maximised to its full usage.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

14. Though COVID-19 pandemic exposes the vulnerability of Informal sector and associated labor force in India, it also presents an opportunity to rebalance formal-informal economy dynamics in the country. Discuss.

(250 words) 15

हालांकि, कोविड-19 महामारी भारत में अनौपचारिक क्षेत्रक और संबद्ध श्रम बल की सुभेद्यता को उजागर करती है, लेकिन साथ ही यह देश में औपचारिक-अनौपचारिक अर्थव्यवस्था की गतिशीलता को संतुलित करने का एक अवसर भी प्रस्तुत करती है। चर्चा कीजिए।

COVID-19 pandemic has widely exposed the vulnerability of informal sector by rendering 81% of it unemployed. But it also presents an opportunity to rebalance formal informal economy dynamics

Exposure of Vulnerability

1) Reduced source of income due to job & livelihood loss.

2) No other alternatives available due to lack of skill development opportunities.

3) Increased out of pocket expenditure to cater to basic services of food & health, increasing vulnerability

4) Major impact on migrants & women

Don't write anything this margin (इस भाग में कुछ ना लिखें)

who do not have money to go back to their homes & face social discrimination respectively.

5) Destruction of supply chains of informal sector leading to further impoverishment of people.

6) 24% unemployment as predicted by CMIE & reduced growth rate to 1.5 - 2% as per World Bank.

7) Lack of basic health facilities & PPE kits to & masks leaving them on the verge of death.

Rebalancing formal-informal dynamics

1) It provides an opportunity to integrate both these sectors to provide portability of social security (like PDS, PMJDY) to informal sectors.

2) Golden opportunity to bank on the gig economy (24% as per Oxford report)

Don't write anything this margin (इस भाग में कुछ ना लिखें)

to ensure better productivity & economic growth in terms of crisis.

3) Schemes like PM Svanidhi are a welcome step to resurrect supply chains of vendors (urban & rural) to integrate them in formal system.

4) Skill mapping (as by MSDE) of returning migrants will help in provision of better skill development opportunities to escalate to formal sector.

5) PMGKAY gives a chance to most underdeveloped districts to use informal workers to build community assets that can be used by formal sector workers.

6) Provision of wastepickers to be integrated into formal economy by means of EPR rules.

COVID 19 can act as a blessing in disguise to provide better social security & economic benefits to informal workers for their holistic development.

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15. Highlight the drivers and challenges facing India's ambition to become a gas-based economy. Mention the steps that have been taken by the government recently in this regard. **(250 words) 15**

गैस आधारित अर्थव्यवस्था बनने की भारत की महत्वाकांक्षा के चालकों और सामना की जाने वाली चुनौतियों को रेखांकित कीजिए। इस संबंध में हाल ही में सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

India's current gas usage accounts for nearly 6.5% which is planned to be raised to 15% by 2030. But achievement of this target comes with its own set of challenges & opportunities.

Drivers to become gas based economy

1) Increasing usage of gas (like natural gas) across citizens for transport & household activities

2) To achieve environmental benefits of less pollution emissions & provision of better air & water (in cities specially)

3) Increased imports of fossil fuels from West Asia is a burden of India's foreign exchequer which can be reduced.

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4) Increasing cost of energy production & provision of employment opportunities
5) Achievement of INDC targets of Paris agreement by 2030.

Challenges

1) Usage of coal & fossil fuel still high due to wide availability & affordability of coal.
2) High usage of oil to fuel economic activities like transport & industries
3) Low commercial viability of natural gas extraction & hence reduced investment for the same.
4) Low infrastructure development in transportation of gas from one place to other (pipelines) hindering its usage.

Steps taken by govt

1) Creation of Indian Gas Exchange (IGX) on IEX to ensure better

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availability of regassified imported natural gas via spot & forward markets ~~across~~ at cheap prices.

2) Construction of India Gas Grid (in North Eastern states) to build a pipeline connecting all those resource rich states.

3) Similar pipelines like JHBPL & other ones built across India to achieve a gas based economy.

4) Provision of real time market exchange for gases to achieve price stability & ensure transparency in auctioning.

5) Provision of subsidies on gas usage to promote maximum usage.

The achievement of a gas based economy by 2030 is crucial in achieving $1 tn economy by 2025 & SDG goals by 2030. Better pricing (removing administrative pricing) & bringing gas under GST are future steps.

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16. Climate Change and the associated events endanger the marine and coastal ecosystems while increasing the vulnerability of coastal population. Examine. **(250 words) 15**

जलवायु परिवर्तन और संबद्ध घटनाएं तटीय जनसंख्या की सुभेद्यता को बढ़ाते हुए समुद्री एवं तटीय पारिस्थितिक तंत्रों को खतरे में डालती हैं। परीक्षण कीजिए।

Climate change & associated events like increase of CO_2 concentrations to 410 ppm (as per WMO GHG bulletin) endanger marine & coastal ecosystems along with increased vulnerability.

[Endangering marine & coastal ecosystems]

1) Phenomena of ocean deoxygenation has led to decrease in oxygen levels (due to high temperature). This has led to death of various species due to increased O_2 demand.

2) Phenomena of Ocean acidification due to increased cases of acid rain has led to removal of coral shells, leading to biodiversity destruction & increased cases of flood (protected by corals).

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3) High emissions from factories & agriculture has led to problems of eutrophication, which has led to species death due to increased nutrient levels.

4) Increased cases of floods & cyclones due to rise in sea surface temperature has threatened survival of fisheries & led to their extinction.

5) Loss of mangrove cover due to climate change leading to excess salinity has decreased flood control provisions & increased soil erosion.

Increasing vulnerability of coastal population

1) Due to decline in fisheries, the survival of coastal population has come on the brink of destruction

2) Saltwater intrusion due to climate change has created issues of food & water security, thus endangering their survival

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3) Increased cases of floods & cyclones renders them helpless & leads to massive destruction of human life & property

4) Issues of increased tourism & domestic & industrial activities lead to water pollution. This ultimately escalates into bioaccumulation & biomagnification, ~~threatening~~ leading to various diseases.

Ways to solve

1) Carbon sequestration activities (~~like~~ to control emissions to achieve better ocean health.

2) Artificial nourishment of beaches & Integrated Coastal Management to achieve better results.

3) Building barrier dams like Rotterdam & mangrove cover, increase will provide better protection to flood control & soil erosion

4) EWS measures to control floods.

India comprises of nearly 4% of earth's fresh water resources & better coastal & marine economy will help achievement of SDG goal (SDG 14).

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17. Using examples, highlight how natural ecosystems perform different hazard mitigation functions. **(250 words) 15**

उदाहरणों का उपयोग करते हुए, रेखांकित कीजिए कि प्राकृतिक पारिस्थितिक तंत्र किस प्रकार अलग-अलग संकट के शमन का कार्य करते हैं।

Natural ecosystems (like forests, mangroves etc.) play a very important role in performing hazard mitigation functions to protect human life & property

Various natural ecosystems

- Mountains
- Forests
- Wetlands
- Coral Reefs
- Mangroves
- Peatlands

Hazard mitigation functions

1) Role of Mangroves → Mangroves help in acting barrier to cyclones (like Amphan) & help in flood control & ~~soil erosion~~ by means of their buttressed roots & pneumatophores.

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2) Mangroves also help in protection of soil erosion by means of binding soil by roots which helps in providing soil runoff & thus landslides.

3) Mountains (Mountain forests) help in binding soil to trees thus preventing cases of landslides & avalanches.

4) Forests act as binding force in filtering nutrients & providing carbon sequestration to prevent climate change issues which can lead to droughts (heat spells) & flood.

5) Forests also help in protection wrt flood by preventing soil runoff thus preventing floods & landslides.

6. Wetlands act as prime barriers to various hazards like floods & cyclones leading to preservation of

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coastal community.

7) Wetlands also help in carbon sequestration & filtering of water to prevent cases of water pollution & increased emissions.

8) Coral reefs help in providing a barrier against increased sea water level & saltwater intrusion by building a chain across coast.

9) Coral reefs also help in filtering water & act as 'system engineers' to preserve coastal economy.

10) Seagrass help in about 11% carbon sequestration & provide fertilizer, food & sediment filtering activities to reduce coastal erosion & runoff.

Thus natural ecosystems perform widespread functions in mitigation of hazards & should be preserved for achievement of SDG goals (SDG 14) by 2030.

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18. Explain what genome sequencing is and state the challenges in scaling up genome sequencing projects. Also, throw some light on the recently launched IndiGen Project. **(250 words) 15**

व्याख्या कीजिए कि जीनोम अनुक्रमण क्या है और जीनोम अनुक्रमण परियोजनाओं को बढ़ावा देने में विद्यमान चुनौतियों का वर्णन कीजिए। साथ ही, हाल ही में आरंभ की गई इंडिजेन (IndiGen) परियोजना पर कुछ प्रकाश डालिए।

Genome sequencing refers to the exact reading of base pairs in the genome to provide multiple economic & socio cultural benefits. It ~~also~~ has opportunities & challenges in scaling up.

Genome Sequencing

1) A genome is one complete set of genetic information of an organism stored in its DNA.

2) Genome sequencing refers to reading of base pairs (approx 3 billion) type by type (ATCG) to achieve multiple benefits.

Challenges in scaling up

i) Technology issue → Issue of wrong sequencing of genome at any point can

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lead to wrong information about organism's genome, which can adversely impact him via pharmacogenomics.

2) Legal issues of the participants who wish to get their genome sequenced vis a-vis issue of consent.

3) Cyber security laws in India are not prudent (no data protection law) which can lead to leakage of pvt information.

4) Ethical issues of creating GMOs
△ designer babies based on genome sequencing

5) lack of infrastructure, funding
△ manpower expertise

Indigen Project

1) It is a flagship project by CSIR that will perform genome sequencing for 1008 Indians to generate database

2) It will be based on consent of these individuals to promote an

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ethical ecosystem of genomic sequencing.

Benefits of Indigen Project

1) Pharmacogenomics → Help in better drug development by identifying exact issues in Indian genomes.
2) Precision & Preventive Health care to citizens based on generated database
3) Development of genetic database which carry the vulnerabilities of human genome which provide future impetus to ↑ R&D in this area.
4) Boosting India's speed in field of genomics & bio informatics.
5) Integration with other biotechnology revolutions like CRISPR Cas9 to achieve better results & healing of diseases like cancer & haemophilia

Genome sequencing is a revolutionary step in biotechnology & hence should be used with caution to promote sustainable development.

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19. India needs to avert radicalisation and societal dissention, as internal faultlines are a breeding ground for cyber and transnational terrorism. Discuss. **(250 words) 15**

भारत को कट्टरपंथीकरण और सामाजिक मतभेदों को रोकने की आवश्यकता है, क्योंकि आंतरिक दरारें साइबर एवं पार-राष्ट्रीय आतंकवाद का जनन स्थल होती हैं। चर्चा कीजिए।

Radicalisation & societal dissention are huge internal issues that contribute to cyber & international Terrorism. They need to be curbed soon to achieve global peace.

Reasons for radicalisation & social dissention

1) Social discrimination among various religious & caste communities that creates an environment of frustration & alienation, resulting in radicalization

2) Issues of borders security wrt Pakistan & ~~Ind~~ China which encourage radicalization by means of propaganda & provision of funds.

3) Issue of less economic development (as in North East India) leads to

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further cases of radicalization

4) Insurgency & issue of migrants hamper social ethnicity creating dissention & tensions within India.

Breeding ground for cyber & transnational terrorism

1) Increased radicalization has led to increase in organized crime activities (like money laundering, trafficking) that provide avenues for transnational terrorism

2) Cases of Maoists being supplied fund by ISIS & militants in POK by China is a prime example of the

3) Increased social dissention lead to increase in propagandizing measures across cyber space (like violent videos) to create culture of cyber terrorism.

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4) These play a major role in recruitment of members in terrorist groups due to increased hatred for government

5) Issue of 9/11 being carried out because of narco terrorism due to increased drug usage by unsatisfied individuals is a prime example.

Curbing radicalization & social disunion

1) Laws like IT Act 1885 & provision of firewalls (like Cybardome) to screen such data & rejection of seditious one.

2) Economic development by means of 11th schedule & infra creation (creation of ADCs like ~~SA~~ATC) to achieve better ~~econ~~employment

3) Power devolution by mode of MoDNER & SHGs to curb radicalization

4) SAMADHAN strategy to curb Maoists & integrate them into society.

Indian values like Vasudhev Kutumbkam & coupled with rule & decentralization is the way forward for achieving global peace.

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20. Given the emerging security challenges, discuss why the establishment of Integrated Theatre Commands is being seen as an important defence reform. **(250 words) 15**

उभरती हुई सुरक्षा चुनौतियों को देखते हुए, चर्चा कीजिए कि क्यों एकीकृत थिएटर कमान की स्थापना को महत्वपूर्ण रक्षा सुधार के रूप में देखा जा रहा है।

Integrated Theatre Commands are the need of the hour to integrate our defence capabilities to achieve holistic results in security domain

Facets of ITCs

- Integrating resources across Navy, Army & Air Force
- Agile & Threat based Terrain & Task
- Can be assembled quickly (12-48hrs)

Need for ITCs to counter security challenges

1) ITCs will look to improve response of Indian defence forces to attacks by volatile neighbourhood of Pakistan & China.

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1) It seeks to improve coordination among various forces to achieve optimum results & resource efficiency

2) It carries both cadres of soldiers & doctors to cater to health challenges faced during war.

4) Better & quick assemblage of forces (5000 under a Major General) to provide quick retaliation to counter attacks.

5) It seeks to be threat, terrain & task based which will help solve border management issues by overcoming issues of hard terrain.

6) Gives impetus to 'Cold War' doctrine of India against Pakistan to immobilise forces along western border for quick results.

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⇒ It seeks to build a thin, mean & lean force capable of following & executing orders quickly.

Issues with ITCs

- Dominance of Army
- Less resources with Air force
- Inhibition in sharing resources & hence coordination experience
- Less

Ways to solve

1) CDS can help achieve better resource devolution across all 3 forces for better & coordinated response.

2) Better tech & artillery availability (by means of DPEPP 2020 & PAP 2020) to achieve better results.

ITCs are the need of the hour to cater to multiple security challenges of tackling infiltration, money laundering, trafficking & wars by other nations.